American College of Obstetricians and Gynecologists (ACOG)

Eligibility

Which patients are considered at high risk for preeclampsia?

Patients with a history of preeclampsia (especially when accompanied by an adverse outcome), multifetal gestation, chronic hypertension, type 1 or type 2 diabetes, renal disease, or autoimmune disease are considered at high risk for preeclampsia.

Is one high-risk factor sufficient for an aspirin recommendation?

The guideline recommends low-dose aspirin for patients at high risk for preeclampsia. The recommendation implies that one high-risk factor is sufficient.

Which factors are considered moderate risk?

- Nulliparity
- Obesity (BMI >30)
- Family history of preeclampsia (mother or sister)
- Sociodemographic characteristics (African American race, low socioeconomic status)
- Maternal age ≥35 years
- Personal history factors

How many moderate-risk factors are required before aspirin is recommended?

More than one moderate-risk factor (two or more).

Treatment Details

Recommended dose

81 mg daily.

When should aspirin be started?

Between 12 and 28 weeks of gestation.

Preferred initiation period

Optimally before 16 weeks of gestation.

If the patient presents after 16 weeks

The guideline states aspirin should ideally begin before 16 weeks but may still be initiated between 12 and 28 weeks of gestation.

When should aspirin be discontinued?

Continue until delivery.

Qualifications

Low-dose aspirin is recommended for women at high risk for preeclampsia or those with more than one moderate-risk factor. It is not recommended solely for previous unexplained stillbirth, isolated fetal growth restriction, spontaneous preterm birth without preeclampsia risk factors, or prevention of early pregnancy loss.

Society for Maternal-Fetal Medicine (SMFM)

Eligibility

Which patients are considered at high risk?

Patients with one or more high-risk factors or more than one moderate-risk factor are considered candidates for low-dose aspirin.

Is one high-risk factor sufficient?

Yes.

Moderate-risk factors

- Nulliparity
- Obesity (BMI >30)
- Family history of preeclampsia
- Black race
- Lower income
- Personal history factors

- Maternal age ≥35 years
- Pregnancy conceived through in vitro fertilization (IVF)

How many moderate-risk factors are required?

More than one moderate-risk factor.

Treatment Details

Dose

81 mg daily.

When should aspirin begin?

Between 12 and 28 weeks of gestation.

Preferred initiation

Between 12 and 16 weeks of gestation.

After the preferred period

Although initiation before 16 weeks is preferred, aspirin may still be started through 28 weeks according to the recommendation reviewed.

Discontinuation

Continue until delivery.

Qualifications

Recommendations are consistent with ACOG. Aspirin is not recommended solely for previous unexplained stillbirth, isolated fetal growth restriction, spontaneous preterm birth without preeclampsia risk factors, or prevention of early pregnancy loss.

Overall Comparison

Which recommendations are supported by randomized controlled trials?

Within the guideline references reviewed, randomized controlled trials supported the effectiveness of low-dose aspirin in reducing preeclampsia, the timing of aspirin initiation, and comparisons of different aspirin doses.

Which recommendations are supported by systematic reviews or meta-analyses?

The recommendations in this reference standard were primarily supported by systematic reviews cited within the professional guidelines. Two cited references were meta-analyses.

Which recommendations rely mainly on expert interpretation or indirect evidence?

Most recommendations were based on evidence synthesized by professional guidelines rather than solely on expert opinion. Clinical judgment is still required when determining whether an individual patient meets the eligibility criteria for aspirin therapy.

Where do major medical organizations agree?

The organizations generally agreed on:

- High-risk factors
- Most moderate-risk factors
- Recommended aspirin dose (81 mg)
- When aspirin should be initiated
- Continuing aspirin until delivery
- Overall recommendation to prescribe aspirin for appropriately selected high-risk patients

Where do they meaningfully differ?

Minor differences were identified.

- ACOG recommends initiation between 12 and 28 weeks, optimally before 16 weeks.
- SMFM more specifically emphasizes initiation between 12 and 16 weeks while still allowing initiation through 28 weeks.
- SMFM explicitly includes pregnancy conceived through in vitro fertilization (IVF) as a moderate-risk factor.
- Minor wording differences exist regarding social and demographic risk factors.

Are differences caused by different evidence?

No major differences were identified. Both organizations rely on largely the same evidence base.

Are differences caused by different definitions?

Minor differences exist in the wording and classification of some moderate-risk factors.

Are differences caused by different risk thresholds?

Minor differences exist in how eligibility criteria are described, but overall recommendations remain similar.

Are differences caused by different healthcare systems?

No. Both organizations are United States professional medical organizations.

Are differences caused by different judgments about benefits and harms?

No major differences were identified. Both organizations conclude that the benefits of low-dose aspirin outweigh the risks in appropriately selected patients.

Has newer evidence changed or challenged older recommendations?

The recommendations have been reaffirmed and updated over time. Newer evidence refined aspects of patient selection while maintaining the overall recommendation to use low-dose aspirin in appropriately selected high-risk pregnant patients.

What limitations exist in the evidence?

Clinical guidelines are based on the best available evidence at the time of publication. As additional studies become available, recommendations may be updated. Some recommendations are based on pooled evidence from multiple studies rather than a single definitive randomized controlled trial.

Do organizations define high- and moderate-risk factors differently?

The organizations define high-risk factors very similarly. Minor differences exist among moderate-risk factors. SMFM includes in vitro fertilization as a moderate-risk factor, while ACOG does not explicitly list it in the source reviewed. Minor wording differences also exist regarding social and demographic risk factors.

Do organizations differ in how they address:

Risk Factor	Difference
First pregnancy	No meaningful difference

Obesity	No meaningful difference
Maternal age	No meaningful difference
Family history	No meaningful difference
Previous adverse pregnancy outcomes	Minor wording differences
Multifetal pregnancy	No meaningful difference
Chronic hypertension	No meaningful difference
Diabetes	No meaningful difference
Kidney disease	No meaningful difference
Autoimmune disease	No meaningful difference
Socioeconomic or demographic factors	Minor wording differences